

REMARKS

Claims 1, 21, 25, and 28-31 were pending in the subject application. The Examiner has finally rejected all pending claims. By this paper, Applicant is amending claims 21 and 25 and is cancelling claims 1 and 28, without prejudice or disclaimer of the subject matter contained therein. Applicant has also added new claim 32. Accordingly, claims 21, 25, and 29-32 are now pending in the subject application. Support the amendments can be found at, for example, paragraph no. 35 of the subject application as filed. No new matter has been added. Applicant respectfully requests reconsideration of the subject application in view of the amendments and the following remarks.

Claim Rejections – 35 U.S.C. §112

The Examiner has rejected claims 21 and 25 as allegedly indefinite with respect to antecedent basis for “the clock rate” in the graphics processor core clock domain. In an effort to expedite the prosecution of the subject application and without conceding as to the substance of the rejections, Applicant has amended claims 21 and 25 to specify “a clock rate,” and respectfully requests withdrawal of the rejections under 35 U.S.C. §112.

Claim Rejections – 35 U.S.C. §103

The Examiner has rejected claim 21 as allegedly unpatentable over Giemborek (US 6,950,105) in view of Williams (US 6,397,343), Oliver (US 7,243,217), and Gulick (US 6,061,802). Applicant respectfully traverses this rejection for the reasons below.

Claim 21 specifies: (1) “in response to detecting a level of utilization greater than a non-zero, over-utilization threshold percentage level for which a display rate of the graphics system is likely to be significantly decreased below a normal display rate, selecting a higher performance level to increase the clock rate in the graphics processor core clock domain;” and (2) “in response to detecting a level of utilization below a non-zero, under-utilization threshold percentage level, selecting a lower performance level to reduce the clock rate in the graphics processor core clock domain to reduce power required by the graphics system.”

The Examiner concedes that Giemborek, Williams, and Oliver fail to disclose the above-quoted features of claim 21, and relies upon Gulick as allegedly curing the deficiencies of the

other cited references. In particular, the Examiner points to the following passage of Gulick at col. 8, line 62 to col. 9, line 5:

It is noted that in an alternative embodiment a plurality of threshold flags are used. A first threshold flag may indicate an upper bound of the desired clock rate and a second threshold flag may indicate a lower bound of the desired clock rate. If the data in the buffer causes the first threshold flag to be asserted, the frame clock rate is decreased. If the data in the buffer causes the second threshold flag to be asserted, the rate of the frame clock is increased. If the data in the data buffer remains at a level between the threshold flags, the clock adjustment is successful and no adjustment is necessary.

As explained in this passage, Gulick's clock rate is reduced if an upper bound is exceeded, and Gulick's clock rate is increased if below a lower bound. In contrast and in accordance with claim 21, a clock rate is increased if an over-utilization threshold percentage level is exceeded, and the clock rate is reduced if below an under-utilization threshold percentage level.

For at least these reasons, claim 21 and its dependent claims 29 and 31 define subject matter that is not taught or suggested by the cited references, and are in a condition for allowance.

As amended, claim 25 includes features similar to those discussed with reference to claim 21. Therefore, claim 25 and its dependent claims 30 and 32 also are in a condition for allowance.

CONCLUSION

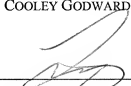
In view of the foregoing, Applicant respectfully submits that no further impediments exist to the allowance of this application and, therefore, requests an indication of allowability. However, the Examiner is requested to call the undersigned if any questions or comments arise.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§1.16, 1.17, and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 50-1283.

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